

**IMPROVING ONE OF THE NATION'S LARGEST RESIDENTIAL STREET
LIGHTING PROGRAMS**

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Introduction

Over the past few decades, Hillsborough County, Florida has experienced a rapid increase in population and urban growth, resulting in a demand for traditional public works services in its unincorporated areas which encompasses more than 700,000 persons. In 1974, the County enacted its first formal ordinance to enable the creation of special districts for residential street lighting and to provide standardized procedures and definitions and powers of the County Commission. This ordinance further defined procedures for special assessments to pay for the cost of the new street lighting system through non- ad valorem special assessments. Over the past 20 years, these procedures have been modified several times through ordinance revisions to accommodate local and state policy changes for the lighting district program (the "Program").

At the end of the last fiscal year, a total of 800 lighting districts have been established, with an annual budget of roughly \$6.5 million. Over 100,000 property owners within the County's unincorporated areas are billed annually for street lighting on their property tax bill. Tampa Electric Company (TECO) installs and maintains all residential street lighting equipment for the County under a 1924 agreement for parcels within the Program. They provide several styles of utility luminaries, fixtures, poles, and wiring equipment under their Bright Choices Program™. There are currently more than 24,000 light poles and 28,000 street lights in this Program. TECO charges the County for the equipment installed in each lighting district on a monthly basis for each pole and light having a fixed maintenance charge and fuel, conservation, and capacity charges for the electricity used by the Program. However, over 93% of the annual charges for the Program are fixed maintenance charges, not the electricity used. All of these charges are pursuant to a rate tariff, which has been filed and approved by the Florida Public Service Commission. Under the current policy, the County combines all lighting districts with similar equipment into one countywide classified group for special assessment purposes. There are currently 12 consolidated lighting district classifications.

How the Program is Administered

In earlier years, various departments within County government were responsible for management of the Program. In 1991, administration of the street lighting program was transferred to the Public Works Department, where it currently continues to operate administratively within the Traffic Services Division. The Program currently has a staff of three people who are responsible for the preparation of billing for non-ad valorem tax assessments for submittal to the County's Tax Collector. To create the assessments, the staff processes and updates the Property Appraiser's parcel and ownership information, mails, public notices, approves engineering plans provided by TECO engineers, records changes to the lighting districts, processes petitions for new districts, and calculates new rates, among other key duties.

Improvements to the Existing Program

Over the years, the levels of service for district street lighting have not increased with changes in technology, as well as residents and business expectations for better lighting. Also, assessments increases had not kept up with the increase in County costs for the Program due in part to the County's hesitancy to raise rates annually by small incremental amounts. Projections made by County staff in 1999 raised concerns that without changes to the current rate system the County would have to draw into reserves for the Program to pay for the cost of the system. The County undertook an internal review of the Program in 2000, and subsequently engaged the services of The John Scott Dailey Florida Institute of Government at the University of South Florida to analyze the Program, evaluate existing assessments, and make recommendations regarding possible improvements to the Program.

Benchmarking Our Program

One of the initial tasks was to identify possible improvements in the County's Program, which could be illustrated in similarly sized communities across the State of Florida and the United States. Further, it was believed that benchmarking current County procedures and processes with these other lighting district programs might also help establish the current standard operating business practices involved with residential street lighting. The County's Program is one of the largest residential street lighting programs in Florida.

In some respects, the answers provided by our survey respondents suggested possible areas for improvements, while at the same suggesting that the County's Program is managed in similar ways to other large street lighting systems. In terms of system operation and equipment ownership, for example, most, if not all street lighting programs are managed as a partnership between the local government entity and the power service provider, which in most respects are investor-owned, electric utilities. The only exception appears to be in areas where the community itself owns an electric utility or contracts with the local electric authority or electric cooperative. Typically, initial lighting installations are provided by the residential developer, with maintenance or upgrades to the lighting equipment provided by the electric service provider. The costs for these services are usually regulated by state Public Service Commissions or individually negotiated with the service provider through annual rate schedules.

In areas of customer billing, capital budgeting, and methods of paying for residential lighting, there appears no real state or national standard. In some localities, costs for residential street lighting service are passed along to residential property owners through special assessments, similar to the system practiced in Hillsborough County, while other local governments continue to pay for the costs of street lighting on residential, arterial, and collector roads through annual cash infusions from their General Fund. Some local governments develop annual capital improvement plans to guide their lighting programs, while other governments add new districts without such plans. Those who have some kind of special assessment program to fund their residential lighting program add an administrative cost to manage the program, but these range widely suggesting that some

governments are using these highly inflated administrative fee percentages to subsidize other public works programs such as roadway lighting on arterials and collector roads. Lastly, those who are funding their residential program costs out of General Fund reserves have implemented some type of assessments on governmentally owned right-of-way by private contractors and public utilities. In essence, this appears to be a tax on the use of public right-of-way to fund street lighting and other public works.

Developing a Standard Operating Procedures Manual

One of the outgrowths of the benchmarking study was the recommendation that the County develop a procedures manual, which would describe standard operating processes, procedures, and policies, which were currently being utilized in the management of the Program. Typically, in the public works arena, the program's management staff knows such information and data "like the back of their hand" as they perform their day-to-day duties. We have found, however, that this information and data is often poorly documented, not written down, or filed away so as require "reinventing the wheel" as these employees move to other positions or retire. Mathematical models, spreadsheets, and forms are often lost or become indecipherable to new staff. Thus, a key goal for the work effort was to document Program processes, procedures, and policies.

The effort to develop the Standard Operating Procedures Manual for the Program became, in large measure, a collaborative effort with staff from the County, TECO, and the Florida Institute of Government. Several long meetings were held over many months, which in essence turned into "hands on" writing sessions to finalize many sections. Information was widely transmitted among the parties to map processes, detail procedures, and identify information needs. The overall effort resulted in a fairly complete manual, which also served to educate both parties about specific governmental processes and corporate procedures that were often unknown to each before the effort was initiated.

Technical Issues Requiring Ordinance Revisions

The overall result of the initial work efforts, particularly those involved in benchmarking and the development of the Operating Procedures Manual was the identification of technical improvements to the lighting district ordinance in a number of key areas. At the outset, the County and consultant team developed a list of possible modifications or revisions to the Ordinance and their feasibility based on available data and information, as well as any need for policy changes by the Board of County Commissioners. An initial list of changes was then developed and the team worked earnestly with the County Attorney's Office on numerous drafts, gathering information from other County departments and constitutional officers (e.g., Hillsborough County Property Appraiser) on such issues as wetland/conservation parcel identification and minimizing minimize ambient light that would unreasonably interfere with astronomical viewing of the night sky in rural areas of the County. To gather additional information, the team met with

stakeholders such as TECO, private developers, and community districts. This effort culminated in a series of revisions or amendments to the existing Ordinance.

Allowing Districts to Upgrade Equipment

Lighting districts date back to 1962 with the installation of the first residential lighting equipment. As you would expect because of the age of some equipment and changes in lighting standards over the years, some districts may require upgrades in equipment or additions of street lights. Districts, which have been established since 1986, are designed by TECO to meet adopted national standards.

Ordinance changes, which were adopted as part of this study, now allow residents in each district to upgrade lighting equipment upon submission of a formal petition to the County that must be approved by 70% of the homeowners living in the specific district. Once the County receives a request for an upgrade, staff requests a formal engineering study from TECO, which will detail all of the work (light poles to be added, those that will need to be relocated, and the number of trees, if any, that need to be removed or trimmed back). Once approved, any upgrades must remain in place for seven years to allow TECO to depreciate the cost of the equipment.

Future Direction of the Program

County staff and consultants are continuing to study other improvements to the existing Program. Foremost on this list is the implementation of minimum lighting standards for new residential and commercial development as part of the County's Land Development Code. Standardization of street lighting would provide consistency in equipment use and avoid problems if the Program is requested to absorb "non standard" lighting equipment into the Program.

Further, the Program currently relies on special assessments of residential parcels to fund the entire cost of residential street lighting and maintenance and some roadway lighting. Funding for lighting of arterials and collector roads is also provided through gas revenue dollars provided by the Board of County Commissioners on an annual basis and grants provided by the Florida Department of Transportation for lighting on state roads. Unfortunately, these funds enable the County to provide roadway lighting on only a small percentage of the nearly 3,000 miles of roads within the unincorporated County. Therefore, additional methods of funding need to be found.

During the course of our study, several methods of funding were evaluated with the objective of expanding lighting services and to more equitably spread the costs of street lighting among all County residents. Currently, property owners fund the costs of the entire Program with other users receiving benefits, but not paying any costs.

Our team is continuing to explore other options of funding street lighting, including evaluating current methods of special assessments to address such technical issues of perimeter district roadway lighting, lighting assessments for parcels on private streets,

assessments on commercial, multi-family, and institutional parcels, among others. Impacts to the overall lighting district assessment will be quantified and presented to the Board of County Commissioners, as appropriate, for possible revisions to the Ordinance.

Improving One of The Nation's Largest Residential Street Lighting Programs

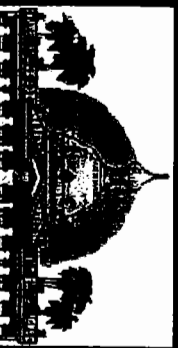
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County Street Lighting Program

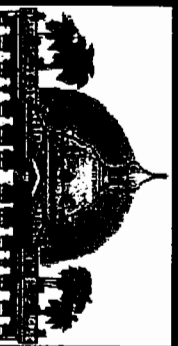
First Ordinance Initiated in 1974

Over 800 Individual Districts

111,000+ Assessed Parcels - \$6.5 Million

24,000 Light Poles – 28,000 Streetlights

\$6.5 Million in Assessments



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Public Works Department Traffic Services Division

Operation of Traffic Signals

Placement of Traffic Signs

Street Pavement Markings

Traffic Calming

Traffic Studies

Residential Street Lighting Program

Management



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Partnership with TECO

County Manages Program - Additions and Assessments

TECO Responsible For Maintenance and Operations

Partnership Based on 1924 Agreement

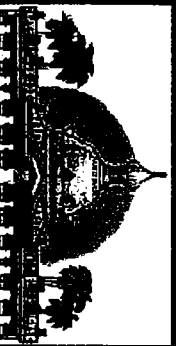


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TECO Billing

Monthly Charge For Equipment, Fuel,
Conservation and Capacity charges
93% For Maintenance Costs
County Combines All Lighting Districts with
Similar Equipment
Rate Tariff Approved by Public Service
Commission



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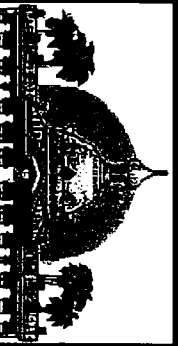
Program Administration

Program Transferred to Public Works in 1991
Creation of Assessment Rolls - Three Person Staff

Update Property Appraiser's Parcel and Ownership Information

Responsible for New District Petitions

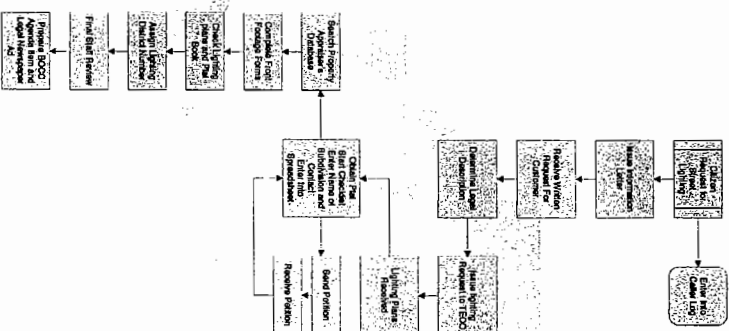
Assessment Collection By County Tax Collector



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Developer Petitions
Approved Annually as
a Group in February
NTP Given to TECO
Installation May
Occur At Different
Times During Year



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[illegible]

Assessment Process

Street Lighting Assessments Collected
Year in Advance

BOCC Entered Into Annual Agreement
With Tax Collector for Assessment

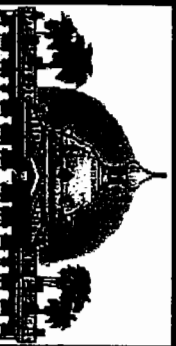
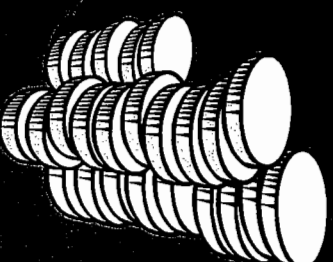
Specific Dates in Florida Statutes

By March 1 – Public Resolution Hearing

By June 1 – Property Appraiser Provides
Property Roll

Between June 1 and September 15 –
Changes to Assessments at Public
Hearing

By September 15 – Roll Certified and Sent
to Tax Collector

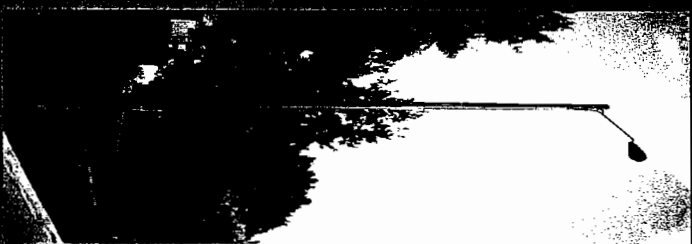


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Program Review

1999 Cost Projections
Raised Concerns
Consultant Study
Reviewed Rates
Levels of Service
County Organization
Needed Revisions in
Ordinance



Final Report

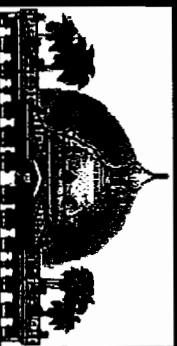


March 2001

March 2001

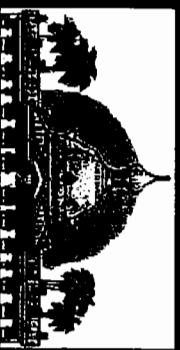
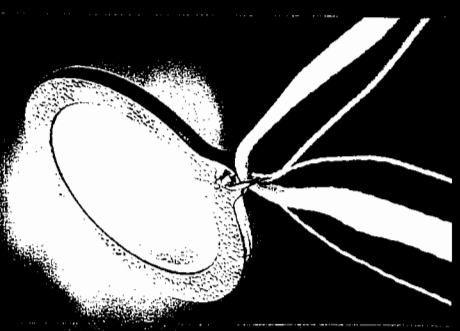
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Benchmarking

Most Are Partnerships With Power Companies
No Standard Method For Customer Billing and
Budgeting
Communities Add Administrative Cost to Special
Assessments
Use of General Funds and Tax on ROW



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Development of Standard Operating Procedures

Partner With TECCO
Document Work Processes
Document Policies



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Ordinance Revisions

Notification Process For Maximum

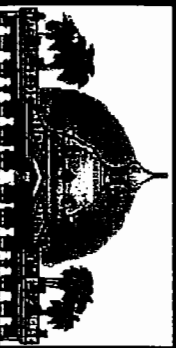
Assessment Increases

Lighting District Classifications

Property Exemptions

New Definitions

Minimum Lighting District Standards



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“...installation of additional lighting equipment within a street lighting district after completion of an engineering study”



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Lighting District Upgrades

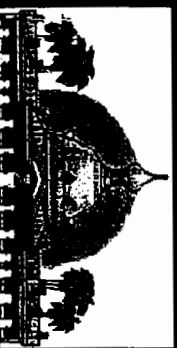
Petition Contains Description of Upgrade Area

Work to be Done (number of light poles to be added, number of poles/lights relocated, trees removed, etc.

New Equipment Must Remain in Place for a Period of at Least 7 Years

Construction Drawings Provided with the Petition

Signers Must Acknowledge That They Have Seen and Approved of the Upgrade Lighting Plan



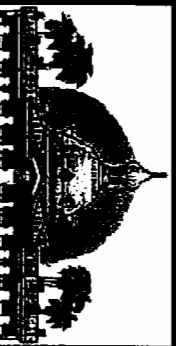
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Upgrades

By Petition – 70% Required Steps

- Request Received from Citizen (“Petitioner”)
- Should Involve Homeowners Association, If Applicable
- Determine Area to be Upgraded
- County Requests That TECO Conducts an Engineering Study - Provides Upgraded Lighting Plan
- County Prepares Petition and Sends to Petitioner With Upgrade Plan



Roadway Lighting Issues

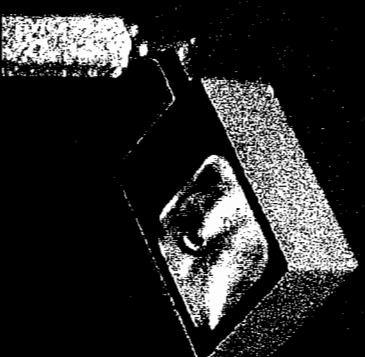
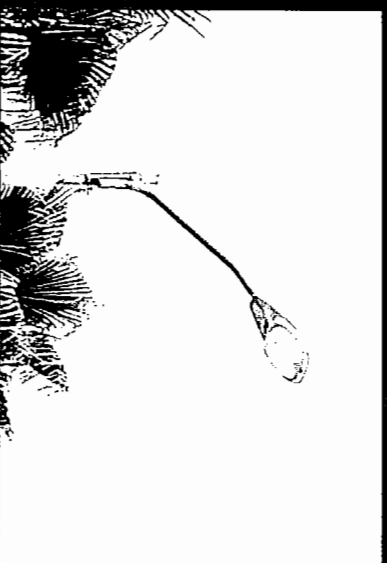
Individual Agreements With TECO
Financial and Fairness Issues
Brought Before BOCC
Use Funding From Residential Program
Fund for Countywide Roadway Lighting



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Equipment Available

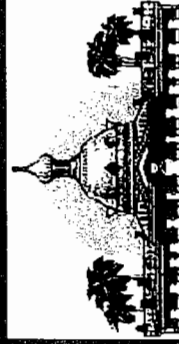
Equipment Must Conform to
Existing County Policies
Limit Lights to 100 watt (possible
150 watt at entrances)
Limit One Light Per Cul-De-Sac
Limit to Every Other Lot Line



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Future Changes

- Illuminated Street Signs
- Arterial and Collector Roadway Lighting
- Study Criteria for New Lighting
- Benchmarking
- Database/GIS Needs
- Financing Options
- Strategic Plan

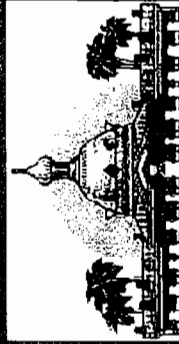


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